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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

ALVESTEFFER, STEPHEN D

ART UNIT	PAPER NUMBER
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2173

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/747,949

Applicant(s)

JEONG, SEOK HWA

Examiner

Stephen Alvesteffer

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office Action is responsive to the amendment filed May 18, 2007 wherein the specification, drawings, and claims were amended. Claims 1, 5, 13, 21, and 23-39 were amended. Claims 40-43 are new. Claims 1 and 21 are independent. Claims 1-43 remain pending.

Claim Objections

Claim 40 is objected to because of the following informalities: On claim 40 line 4, "careen saver" should be corrected to —screen saver—. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 40-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner cannot find "an audible pattern and a visible pattern indicative of the time difference" (claims 40 and 42) or "the audible pattern and the visible pattern

Art Unit: 2173

is initiated based on the counting of said current system idle time and is discontinued by detection of system input activity" (claims 41 and 43) in the original disclosure. These claims appear to recite a continuous or repeating audible signal indicative of the time difference that does not terminate until system input activity is detected, which does not appear in the original disclosure. Specifically, the examiner cannot find the words "audible pattern", "visible pattern", or any indication that the "audible pattern" continues until detection of system input activity. It is advised that the applicant rewrite the claims so as to use the same terminology as in the original disclosure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 13-15, 19-23, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi, United States Patent Application Publication number 2003/0191960 and Lee, United States Patent number 6,076,169.

Regarding claim 1, Hung-yi teaches a method of providing an advance screen saver warning for a display apparatus, the method comprising: predetermining a screen saver standby time and an advance screen saver

Art Unit: 2173

warning time (see paragraph [0010]; *"within five minutes before the time of using the computer running out, said main program thereof will send out a warning signal and sound to remind the user of the time-limit. Or, there may be less than five minutes left for using the computer when the user first enters the computer. In either case, when the pre-set using time is up, said main program thereof will automatically start said screen saver"*, the "pre-set using time" being equivalent to the "screen saver standby time", and the "five minutes before the time of using the computer running out" being equivalent to the "advance screen saver warning time"); and activating an advance screen saver warning before activating a screen saver if the current system **usage** time is greater than or equal to a time difference between the screen saver standby time and the advance screen saver warning time (see paragraph [0010]). Hung-yi does not disclose counting a current system idle time during which no system input activity is detected; activating an advance screen saver warning based on the system **idle** time (as opposed to the **usage** time), wherein the activated advance screen saver warning is continuously executed by the display apparatus until a detection of system activity, whereupon the advance screen saver warning is deactivated, and wherein the screen saver is activated only if the advance screen saver warning time is completed. However, Lee teaches using a current system idle time to activate a power shutdown function if the current system idle time is greater than or equal to a time difference between the screen saver standby time and the power shutdown function time (see column 3 line 66 through column 4 line 29; *"if no input signal is received, the central processing unit 4 checks*

whether a second predetermined time period has elapsed, preferably a time period of five minutes. At step S5, if there is no input signal for the duration of the second predetermined time period, the central processing unit 4 terminates the operating system program"). Lee further teaches that the activated power shutdown function timer is continuously executed by the display apparatus until a detection of system activity, whereupon the power shutdown function timer is deactivated (see column 4 lines 17-29; *"if there is an input signal from the keyboard 2, mouse 3, or other input device 10, the original screen is returned so that the user can resume work on the computer system")*), and wherein the power shutdown function is activated only if the power shutdown function time is completed (see column 4 lines 17-29; *"if there is no input signal for the duration of the second predetermined time period, the central processing unit 4 terminates the operating system program")*). One of ordinary skill in the art at the time the invention was made would have found it obvious and advantageous to provide an advance warning countdown (as taught by Hung-yi) prior to a disruptive system event such as a locking screen saver (as taught by Hung-yi) or an automatic power shutdown (as taught by Lee) for the purpose of giving users time to prevent the disruptive system event from occurring or to prepare for the event.

Regarding claim 2, Hung-yi teaches deactivating the advance screen saver warning and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time (see Hung-yi claim 1; *"sending out warning signal and sound to remind the user that the pre-set time-*

Art Unit: 2173

limit is coming to an end soon; once passing the pre-set using -time, said main program thereof restarting the screen saver"). It is inherent in Hung-yi's invention that the advance screen saver warning is deactivated prior to activation of the screen saver.

Regarding claims 4 and 15, Lee teaches resetting the screen saver activation timer if any system input activity is detected (see Lee column 4 lines 17-28; *"if there is an input signal from the keyboard 2, mouse 3, or other input device 10, the original screen is returned so that the user can resume work on the computer system"*).

Regarding claims 13-14, Hung-yi further teaches that the activating an advance screen saver warning comprises outputting a predefined warning sound through a speaker, wherein the predefined warning sound is any one of a computer-generated sound and a human voice indicating a time remaining until the screen saver is activated (see Hung-yi paragraph [0010]; *"said main program thereof will send out a warning signal and sound to remind the user of the time-limit"*).

Regarding claims 19 and 20, it was well known in the art at the time the invention was made that screen savers deactivate when input activity or input from a keyboard or mouse is detected.

Claims 21, 22, and 23 recite a display apparatus that performs substantially the same functions as claims 1, 2, and 4, respectively. Therefore, claims 21, 22, and 23 are rejected under the same rationale.

Claim 32 recites a display apparatus with substantially the same limitations as the method of claim 14. Therefore, claim 32 is rejected under the same rationale.

Claim 33 recites a display apparatus that has substantially the same limitations as claim 15. Therefore, claim 33 is rejected under the same rationale.

Claims 3 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi (2003/0191960) *supra*, Lee (6,076,169) *supra*, and Flannery, United States Patent number 6,286,106.

Regarding claim 3, Hung-yi and Lee teach all the limitations of claim 3 except for the deactivating the advance screen saver warning and the activating the screen saver are performed simultaneously. Flannery teaches a computer power down notification that simultaneously deactivates the advance power down warning and activates the power down (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the computer power down notification of Flannery in the computer lock system of Hung-yi and Lee in order to notify users of the time remaining before the screen saver will lock the computer.

Regarding claim 16, Flannery teaches a warning countdown that is continuously updated until the timer runs out and the system powers down (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*).

Regarding claims 17 and 18, Flannery teaches counting down a predetermined amount of time before initiating a system event (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*).

Claims 5-12, 24-31, and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi (2003/0191960) *supra*, Lee (6,076,169) *supra*, and Kirkland, United States Patent number 7,110,995.

Regarding claims 5-12, Hung-yi and Lee teach all the limitations of claims 5-12 except the visual representation of the warning message. The method of calculating the remaining time by subtracting the current system idle time from the screen saver standby time recited in claims 6 and 25 is the obvious method of calculating the remaining time and inherent in the invention of Hung-yi.

Art Unit: 2173

The methods of undisplaying the warning message window from the display screen if any system input activity is detected and undisplaying the warning message window and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time, as per claims 10-11 and 29-30, are obvious functions of screen savers well known in the art at the time the invention was made. Kirkland teaches generating a graphical representation of an estimated time remaining before an event occurs (completion) (see Abstract). The graphical representation of time remaining as taught by Kirkland includes both a textual representation and a bar-type graphical representation of the remaining time (see Figures 10 and 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the invention of Hung-yi with the graphical representation of Kirkland in order to provide the visual representation of the warning message.

Claims 24-31 recite a display apparatus with substantially the same limitations as the method of claims 5-12. Therefore, claims 24-31 are rejected under the same rationale.

Claims 34-37 recite a display apparatus that has substantially the same limitations as claims 16-20. Therefore, claims 34-37 are rejected under the same rationale.

Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi (2003/0191960) *supra*, Lee (6,076,169) *supra*, and Bi et al. (hereinafter Bi), United States Patent number 6,683,605.

Regarding claims 38 and 39, Hung-yi and Lee teach all the limitations of the claims except for the “memory coupled to the controller for storing the predetermined screen saver standby time and advance screen saver warning time” wherein the memory “is an Electronically Erasable Programmable Read-only Memory (EEPROM)”. Bi teaches that an EEPROM memory “may be used to maintain system configuration parameters when the system is powered off. All user changeable parameters are stored in the EEPROM” (see column 19, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to store predetermined screen saver configuration parameters in an EEPROM memory for the purpose of maintaining system configuration parameters even when the system is powered off.

Response to Arguments

The amendments to the Specification filed May 18, 2007 have been accepted by the examiner. All objections to the Specification are withdrawn.

The amended drawings filed May 18, 2007 have been accepted by the examiner. Accordingly, all objections to the Drawings are withdrawn.

The amendment to the claims wherein the appropriate claims were renumbered 1-39 has been accepted by the examiner. Accordingly, all objections to the claims 1-39 are withdrawn.

Art Unit: 2173

Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Alvesteffer whose telephone number is (571) 270-1295. The examiner can normally be reached on Monday-Friday 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571)272-4048. The fax

Art Unit: 2173


phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stephen Alvesteffer
Examiner
Art Unit 2173



8-3-2007



JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100